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ABSTRACT

The purpose of this study was to describe the implementation of a system of individually guided motivation utilizing individual and goal setting conferences. Before students were assigned to groups, they completed a self assessment form on which they rated themselves on 20 behaviors. Teachers from each Unit, using a Consensus method, also evaluated each student on the same set of behaviors. Within each Unit students were randomly assigned to one of four conditions: no conferences, individual conferences, small group conferences, or medium group conferences. Teachers encouraged students to define the meaning of behaviors and to pick a behavior or a group of behaviors on which to improve. The child would then set goals for himself. The experimental period lasted 8 weeks. At the end of the period, another assessment form identical to the initial one was completed by the student and the teachers. Overall behavior rating results indicated that there was a tendency for the students to show greater gains in pre-post ratings than students in the control groups. Students receiving individual conferences gained more than students in small or medium groups. In general, the teacher ratings seemed to change more from pre- to Post-assessment than did student ratings. (Author)

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MOTIVATIONAL DEVICE TO
IMPROVE STUDENT CONDUCT
AND INCREASE STUDENT
SELF-DIRECTION:
A PRELIMINARY STUDY**

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**CENTER FOR
COGNITIVE LEARNING**

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STUDENT CONDUCT AND INCREASE STUDENT SELF-DIRECTION:
A PRELIMINARY STUDY

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Report from the Project on Situational Variables
and Efficiency of Concept Learning
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This Technical Report is from the Situational Variables and Efficiency of Concept Learning Project in Program 1. General objectives of the Program are to generate new knowledge about concept learning and cognitive skills, to synthesize existing knowledge, and to develop educational materials suggested by the prior activities. Contributing to these Program objectives, the Concept Learning Project has the following five objectives: to identify the conditions that facilitate concept learning in the school setting and to describe their management, to develop and validate a schema for evaluating the student's level of concept understanding, to develop and validate a model of cognitive processes in concept learning, to generate knowledge concerning the semantic components of concept learning, and to identify conditions associated with motivation for school learning and to describe their management.

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ABSTRACT

The purpose of this study was to describe the implementation of a school-wide system of individually guided motivation utilizing individual and group goal-setting conferences.

Before students were assigned to treatment groups, all students completed a self-assessment form on which they rated themselves on a set of 20 behaviors. Teachers from each Unit, using a consensus method, also evaluated each student on the same set of 20 behaviors.

Within each Unit (a Unit may contain more than one grade), students were randomly assigned to one of four conditions: no conferences, individual conference, small-group conference (3-4 students), or medium-group conference (6-8 students). Students assigned to conference conditions met with the teacher once every other week. Individual conferences were from 7-10 minutes in length and small- and medium-group conferences, on the average, 15-20 minutes. All conferences were held with a teacher from the Unit.

At the first conference, regardless of group size, each student received an unmarked copy of the student assessment form to be used for goal setting. During the conferences, teachers endeavored to encourage students to define the meaning of behaviors and to pick a behavior or a group of similar behaviors on which to improve between conferences. The child would then set a goal or goals for himself. At each succeeding conference, each child reported on the progress he had made toward his goals.

The experimental period lasted 8 weeks. At the end of the period, another assessment form identical to the initial one was completed by both the student and the teachers.

Overall behavioral-rating results indicated that there was a tendency for the students in the conference conditions to show greater gains in pre-post ratings than students in the control groups. Students receiving individual conferences gained more than students in small or medium groups. When analysis of pre-post scores was done separately for student and teacher ratings, significant differences in gain scores between conference conditions appeared only in the student ratings. The average gains, however, on the teacher assessments showed the same pattern as the student ratings. In general, the teacher ratings seemed to change more from pre- to post-assessment than did student ratings.

Comments obtained from a series of interviews with the principal and Unit leaders, indicated that they considered the conferences to be highly effective motivational devices.

I INTRODUCTION

The purpose of this paper is to describe the implementation of a school-wide system of individually guided motivation at Wilson Elementary School in Janesville, Wisconsin. For the past several years, Wilson, a multi-unit school, has placed major emphasis on developing an individually guided instructional program in which instruction in subject-matter areas is geared to the characteristics and needs of each child. The recent efforts in motivation at Wilson reflect this concern with individualization.

A starting point for a system of individually guided motivation is a clear statement of behaviors indicative of motivation on the part of children which then become the objectives of the system. A second component of a system of motivation is a statement of principles of motivation based on theory and research through which the objectives can be reached. Finally, clear description of activities of teachers and students by which the principles can be implemented are needed.

Part of the on-going research and development activity of the project on Situational Variables and Efficiency of Concept Learning at the Wisconsin Research and Development Center for Cognitive Learning has been the development of such a system of individually guided motivation. The next section of this paper will be devoted to a description of the system of individually guided motivation developed at the center. Remaining sections will then describe the implementation of certain elements of the system at Wilson School.

THE SYSTEM OF INDIVIDUALLY GUIDED MOTIVATION

When developing the objectives for a system of motivation, one must consider observable behaviors or actions of students which are indicative of wanting to learn subject-

matter knowledge and skills and prosocial values. These behaviors should represent a good balance between conformity to the school's code of conduct and individual freedom of expression. Such behaviors, when properly stated, are the objectives of a school's system of individually guided motivation and can, in turn, be used to establish a program that may be appropriate for each child. In Table 1 are found the objectives of the system of motivation. The objectives are stated at two levels of generality. Four general objectives are stated that deal with motivation for: learning subject-matter knowledge and skills, developing independence from adults in connection with motivation, following school policies and practices in connection with conduct, and conceptualizing a value system. More specific behaviors related to each general objective are given. At the next level of specificity, the teacher of, say, a 7-year-old, after assessing the child's characteristics and behaviors related to motivation, would state more precise objectives. For example, "Begins tasks promptly" requires further specification of the tasks that are appropriate for children of varying age and school levels.

Certain of the objectives listed in Table 1, specifically those related to learning of subject matter, independence of motivation, and conformance to rules of conduct, formed the basis for the Wilson School motivation project. The objectives were reworded and defined by the teachers and students at Wilson to fit their particular circumstances.

The objectives of the system of motivation are reached through the application of various principles of motivation. In the left column of Table 2 are given generalizations concerning motivation. These are conclusions drawn mainly from laboratory studies and related theorizing about motivation. In the right column instructional guides are listed that are parallel to the

Table I
Behaviors Indicative of Motivation

-
- A. The student starts promptly and completes self-, teacher-, or group-assigned tasks that together comprise the minimum requirements related to various curriculum areas:
1. Attends to the teacher and other situational elements when attention is required.
 2. Begins tasks promptly.
 3. Seeks feedback concerning performance on tasks.
 4. Returns to tasks voluntarily after interruption or initial lack of progress.
 5. Persists at tasks until completed.
- B. The student assumes responsibility for learning more than the minimum requirements without teacher guidance during school hours and outside school hours. In addition to Behaviors 1-5, the student:
6. Continues working when the teacher leaves the room.
 7. Does additional work during school hours.
 8. Works on school-related activities outside school hours.
 9. Identifies activities that are relevant for class projects.
 10. Seeks suggestions for going beyond minimum amount or quality of work.
- C. The student behaves in accordance with the school's policies and practices in connection with use of property, relations with other students, and relations with adults:
11. Moves quietly within and about the school building during quiet periods and activities.
 12. Interacts harmoniously with other students.
 13. Interacts harmoniously with the teacher and other adults.
 14. Conserves own and other's property.
 15. Tells other students to behave in accordance with school policies.
- D. The student verbalizes a value system consistent with the preceding behaviors:
16. When asked, gives examples of his own actions illustrative of Behaviors 1-15.
 17. When asked, gives reasons for manifesting Behaviors 1-15.
-

generalizations.¹ The first three generalizations deal primarily with motivational concerns related to the learning of school subject matter: focusing of attention, goal setting and goal attainment, and providing informative feedback after activities are underway. The next two generalizations are more directly applicable to student conduct, dealing with the initial acquisition, persistence and other prosocial behaviors. The last two generalizations are equally relevant to both learning and conduct.

¹The heuristic and theory discussed here are due in major part to Dr. Herbert J. Klausmeier.

Once the principles of motivation are stated, it then becomes necessary to devise procedures or activities on the part of teachers and students to implement the principles.

The activities developed at Wilson School involved individual and group conferences in which the principles of reasoning, modeling, and goal setting could be implemented. The project at Wilson to be described in the next sections should be considered as a pilot study. The attempt was made to gather knowledge concerning: the appropriate group size for conferences at different grade levels, the ability of teachers to conduct group and individual conferences in a nondirective manner, and the effectiveness of procedures whereby students could become self-directive in setting and attaining goals related to motivation.

Table 2
Generalization and Corollary Instructional Guides

Generalization	Instructional Guides
A. Properties of the environment may be manipulated and the students' perceptions may be modified in order to focus student attention toward learning tasks.	A. Focus student attention on desired objectives.
B. The individual's curiosity and his desires to manipulate and achieve control over elements of the environment may be utilized in directing activity used in goal setting.	B. Utilize the individual's curiosity and needs for manipulation and competence.
C. Setting and attaining goals require learning tasks at an appropriate difficulty level; feelings of success on current learning tasks heighten motivation for subsequent tasks; feelings of failure lower motivation for subsequent tasks.	C. Help each student set and attain goals related to the school's educational program.
D. Providing information concerning correct or appropriate behaviors and correcting errors are associated with better performance on and more favorable attitudes toward the learning tasks.	D. Provide for informative feedback.
E. Many prosocial behaviors indicative of self-control, self-reliance, and persistence are initially acquired through observing and imitating a model and are strengthened through reinforcement.	E. Bring exemplary real-life and symbolic models into the school setting.
F. Reasoning with students about prosocial values and behaviors provides a conceptual basis for the development of the behaviors.	F. Provide for verbalization of prosocial values.
G. The expectancy of receiving rewards for a specified behavior or achievement directs and sustains attention and effort toward manifesting the behavior or achievement. Nonreinforcement after a response tends to extinguish the response. The expectancy of receiving punishment for manifesting undesired behavior may lead to suppression of the behavior, to avoidance or dislike of the situation, or to avoidance and dislike of the punisher.	G. Develop and use a system of rewards as necessary to secure sustained effort and desired conduct. Use punishment as necessary to eliminate and suppress misconduct.
H. Sustained high stress is associated with low performance, erratic conduct, and personality disorders.	H. Avoid the use of procedures that create temporary high stress or chronic anxiety.

II METHOD

SUBJECTS

Subjects for this project were students regularly enrolled in Grades K-6 at Wilson Elementary School, Janesville, Wisconsin. Wilson School receives Title I funds for low-socio-economic status schools but is not racially mixed. Wilson also receives Title III funds for demonstrations of innovations.

Since the school functions on the Multiunit plan, the students are placed in a Unit instead of a grade. Complete data were available for 117 students in Unit I (Kindergarten), 102 students in Unit II (First Grade), 88 students in Unit III (Second Grade), 166 students in Unit IV (Third and Fourth Grades), and 155 students in Unit V (Fifth and Sixth Grades).

DESIGN AND PROCEDURE

Initial Assessments

Before students were assigned to treatment groups, all students at Wilson School completed a self-assessment sheet on which they rated themselves as of that date on a set of 20 behaviors. The list of behaviors is found in Table 3. Assessments were carried out in groups of 25 to 30 and students were told that their ratings were in no way related to school grades. The students rated themselves on a 5-point continuum ranging from "almost always doing the job yourself" to "almost always having to be told to do the job". As soon as each student had completed this self-assessment sheet, it was collected and neither the student nor his teachers had reference to it during the project period. Although teachers were present, students passed out and collected assessment sheets when possible. It should be noted, however, that the younger children needed help from a teacher or aide in marking these evaluation

sheets but that the adults wrote down the child's decision without trying to influence him in any way.

Teachers from the Unit, a minimum of two teachers in the smaller Units and three teachers in the larger Units, also evaluated each child on the same 20 behaviors on which the student had evaluated himself. The teacher assessment form is found in Table 4. The teachers met together for this evaluation with each teacher first making an independent judgment as to the student's present location along the 5-point scale. The ratings of the teachers were then averaged for each behavior (rounded to the nearest half-point) to obtain the final value designated for each child on the teacher-assessment form. Teacher-assessment forms were filed in the central office and were not accessible during the project period.

Assignment of Students to Treatment Groups

Within each Unit, all students were randomly assigned in approximately equal numbers to one of four treatment groups: (1) control group which received no conferences; (2) individual conferences; (3) small-group (3-4 students) conferences; or (4) medium-group (6-8 students) conferences. All conferences were held with a teacher from the Unit with individuals or groups assigned to the same teacher for the duration of the project. Each teacher was assigned to student conferences so that they had approximately equal numbers of students for individual, small- and medium-group conferences. That is, each teacher had 6-8 students for individual conferences, 6-8 students divided into two small-conference groups and 6-8 students for one medium-conference group.

Table 3
Student Self-Assessment Checklist

Name _____ Sex _____ Age _____ Date _____

Directions:

Put an X under column **1** if you almost always have to be told to do the job.

Put an X under column **2** if you usually have to be told to do the job.

Put an X under column **3** if you sometimes do the job yourself and sometimes have to be told to do it.

Put an X under column **4** if you usually do the job yourself.

Put an X under column **5** if you almost always do the job yourself.

	1	2	3	4	5
1. I listen to the teacher.					
2. I begin schoolwork right away.					
3. I correct mistakes.					
4. I work until the job is finished.					
5. I work when the teacher has left the room.					
6. If I make mistakes, I still keep working.					
7. I work on learning activities in free time.					
8. I get to class on time.					
9. I do extra schoolwork.					
10. I do my share in class projects.					
11. I read during free time.					
12. I ask questions about schoolwork.					
13. I have pencil, paper, and books ready when they are needed.					
14. I move quietly to and from my classes.					
15. I listen to the ideas of others.					
16. I help my classmates.					
17. I pick up when the work is finished.					
18. I take care of my clothing, books, and other things.					
19. I take care of the school's books, desks, and other things.					
20. I follow directions.					

Table 4
Teacher Assessment of Student Checklist

Name of Pupil _____ Sex: M _____ F _____ Age _____
Date of Initial Assessment _____ Date of Final Assessment _____

TASKS TO BE EVALUATED	Initial					Final				
	1	2	3	4	5	1	2	3	4	5
1. Listens to teacher.										
2. Begins task promptly.										
3. Corrects mistakes.										
4. Works to task completion.										
5. Works after teacher leaves room.										
6. Works after failure.										
7. Engages in learning activities in free time.										
8. Arrives at class on time.										
9. Seeks independent work.										
10. Participates in class projects.										
11. Reads independently.										
12. Asks inquiry questions.										
13. Comes well-equipped for learning activities.										
14. Moves quietly to and from learning areas.										
15. Listens to ideas of others.										
16. Helps peers with their problems.										
17. Picks up after learning activities.										
18. Takes care of personal property.										
19. Takes care of public property.										
20. Follows directions.										

Conference Procedure

At the first conference, regardless of the size of the group, each student received an unmarked copy of the student-assessment sheet to be used as a goal-setting sheet.

The 20 behaviors on the student and also the teacher-assessment sheets were derived from the behaviors listed in Table 1 as the objectives for a system of individually guided motivation. Many of the behaviors were originated in the Wilson student council over a 2-year period.

During the conferences, the students were encouraged by the adult conducting the conference to discuss the behaviors listed and to group similar behaviors. During the discussion the teacher endeavored to get the children to define the meaning of each of the behaviors through the use of examples of everyday instances of the behavior. Each child was then encouraged to pick a behavior or group of similar behaviors that he wanted to improve on between conferences. The child then assessed where he presently ranked on that behavior and then set a goal for himself in terms of where he wanted to rate on the behavior by the next conference. At each succeeding conference each child reported on the progress he had made toward his goal. Thus, the goal setting was entirely self-directed. Not only did the children set their own goals but they assessed their own progress in achieving their goals. The adult provided reinforcement for any report of improvement.

Throughout the conferences, the adults attempted insofar as possible to play a nondirective role. The adult accepted the goals of the child and his report of progress. The main job of the adult was to insure through discussion that the children understood what each behavior meant. The adult also tried to help the children realize that behaviors can be related. In conducting the conferences, the adults attempted to accept the children's responses and rework them to get at real problems. The sincerity of a child's response was never overtly doubted.

Within the larger groups, the adult attempted to maintain the mood of the group as one of cooperativeness, rather than competitiveness. The children in the group were encouraged to listen to each other's ideas and to build each other up rather than to criticize.

The motivational principles used in the goal-setting conferences were: reinforcement, feedback, and reasoning.

REINFORCEMENT in terms of praise was administered by the adult whenever a child showed progress toward his goal. In the group conferences, not only were children directly reinforced but they also observed others being reinforced for attaining goals.

FEEDBACK was provided periodically by the adult to each child. The adult kept a Conference Comment Card on each child so that progress and problems could be noted. The feedback consisted of telling the child how many goals he had attained and how, in

general, he was succeeding in manifesting the behaviors on his sheet.

REASONING was involved when the adult attempted to elicit from the children the reasons they thought they should exhibit the behaviors. The children discussed with each other and with the adult the consequences of their own behavior in various situations. In the group conferences, the adult tried to guide the children to a consensus about the relative importance of the behaviors to the individual and to the school as a whole. That is, the adult, in a nondirective fashion, led the children to conceptualize and verbalize the reasons behind their own behavior and why it is important that they conform to certain rules and exhibit certain behaviors.

LOCATION AND SCHEDULING. The location of conferences varied depending on the size of the conference group. Individual conferences were held in one of the many small rooms or corners of rooms already designated for individual or small-group study in Wilson School. The medium-group conferences were held in a separate room, or in a classroom not occupied during a particular block of time during the day, since 6-8 students could easily disturb other activities in a room. Also, individual and small-group conferences could be held in a corner of the two learning centers available in Wilson School and occasionally individual conferences were held in the corner of a regular classroom.

Conferences in Units II, III, IV, and V were held every other week for an 8-week period for a total of four conferences. If a student was absent for a scheduled conference, this conference was re-scheduled for a later time so that each student had an opportunity to participate in four conferences. In Unit I, each child assigned to a conference-treatment group participated in four conferences. However, these conferences were held during consecutive weeks because the teachers felt that children this young needed more frequent reinforcement and feedback.

All conferences at all Unit levels were held during regular school hours, not during recess periods, noon hours, or after school. This was possible because Wilson School operates under the Multiunit plan which allows for flexible scheduling of teacher as well as pupil time. Actual hours of the day during which conferences were held depended on Unit programming. Usually each Unit scheduled their conferences at the beginning of a week.

The medium- and small-group conferences lasted, on the average, 15-20 minutes. The individual conferences were from 7 to 10 minutes in length.

FINAL ASSESSMENTS. At the end of the experimental period (8 weeks in the upper Units and 4 weeks in Unit I), all students including those in the control group completed another self-assessment sheet identical to the initial one. Each student again rated his current standing on each of the 20 behaviors.

The same teachers, using the same method of evaluation as used initially, again rated each student on the 20 behaviors.

Within 1 week after the end of the project period, all student- and teacher-assessment

sheets, student goal-setting sheets, and teacher-comment cards were collected.

DATA GATHERED

A pre- and post-self-assessment checklist sheet and a teacher-assessment form containing pre- and post-evaluations were available for each student. In addition, student goal-setting sheets and teacher comment cards were also collected. One month after the completion of the project, structured interviews were conducted with the principal and unit leaders at Wilson to obtain their evaluation of the project.

III RESULTS

BEHAVIORAL RATINGS

The quantitative data from the pilot study included the pre- and post-assessments of the

20 behaviors by both students and teachers. The average pre- and post-assessment scores for each unit as a function of conditions are shown in Figures 1 through 5. The ratings for

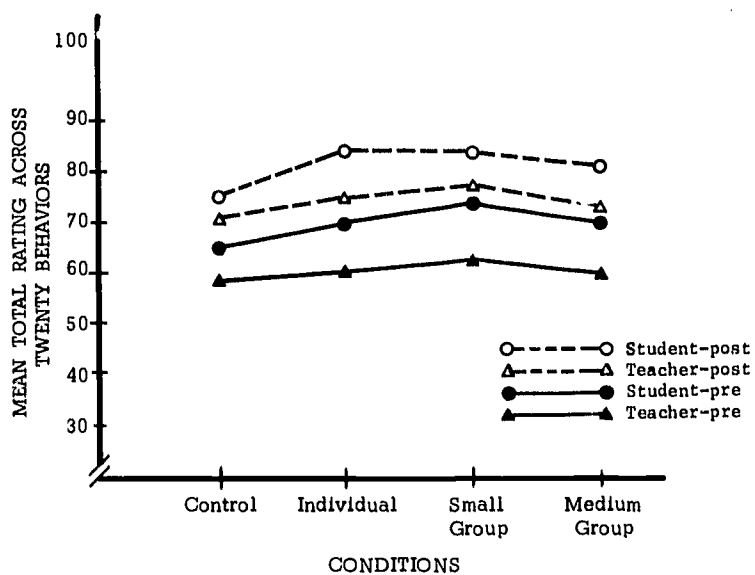


Figure 1. Pre- and Post-Assessment Scores in Unit I by Teacher and Students as a Function of Conditions

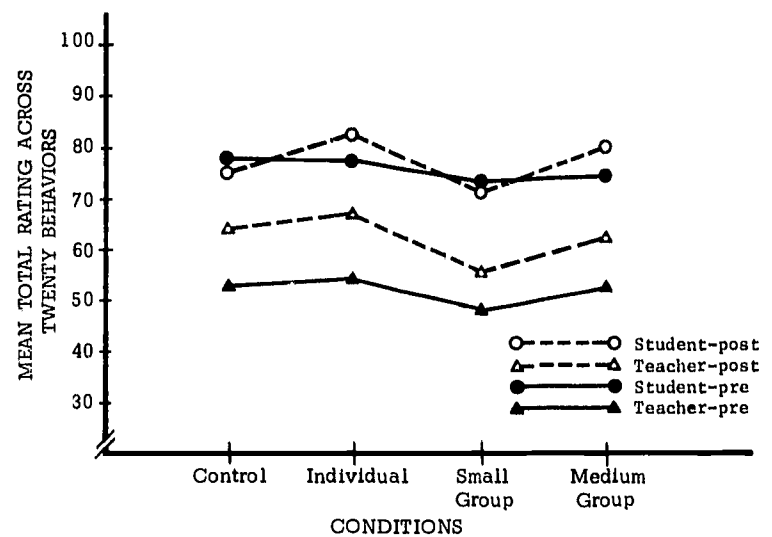


Figure 3. Pre- and Post-Assessment Scores on Unit III by Teacher and Students as a Function of Conditions

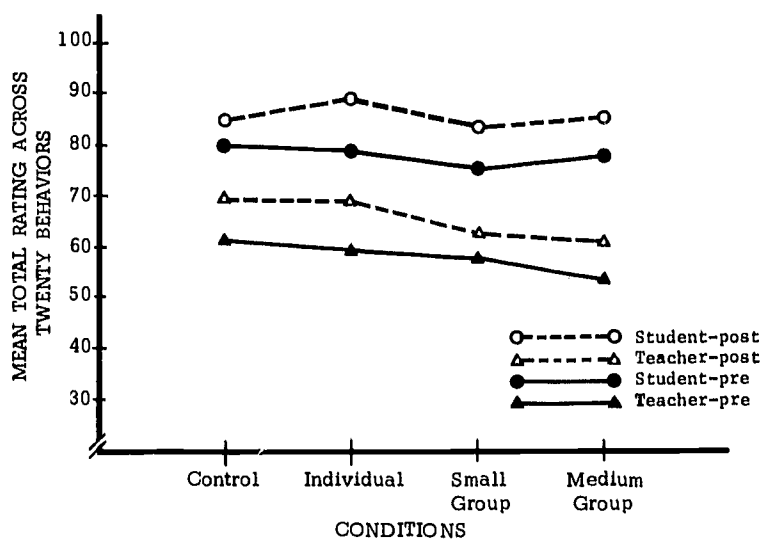


Figure 2. Pre- and Post-Assessment Scores in Unit II by Teacher and Students as a Function of Conditions

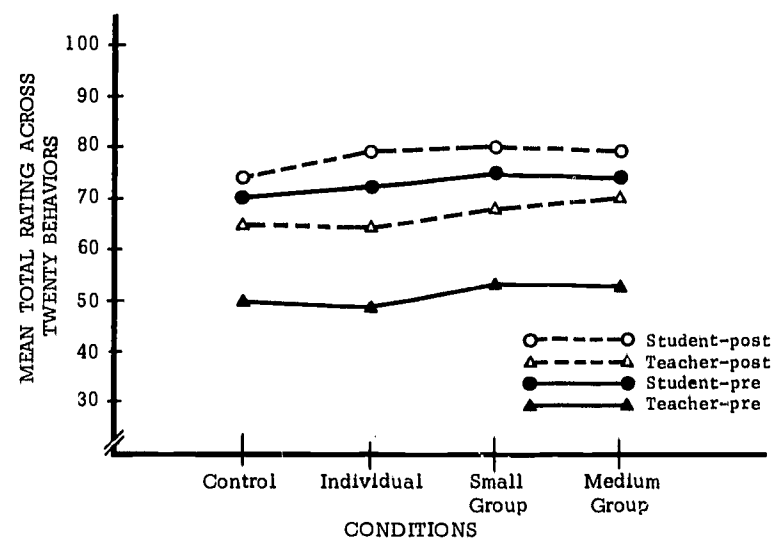


Figure 4. Pre- and Post-Assessment Scores in Unit IV by Teacher and Students as a Function of Conditions

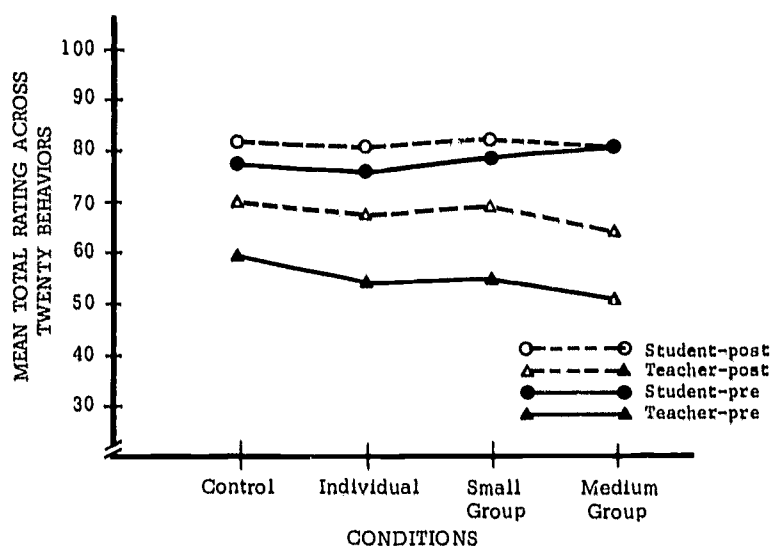


Figure 5. Pre- and Post-Assessment Scores in Unit V by Teacher and Students as a Function of Conditions

the behaviors were summed for each individual to provide total pre- and post-scores which were then averaged across individuals in each group. The pre- and post-assessment scores summed across Units for students and teachers as a function of conditions are contained in Figure 6.

It is apparent from the figures that students rated themselves higher on both pre- and post-assessments than did their teachers. This discrepancy between teachers and students was true for all Units.

It is also apparent from the figures that gains were made from pre- to post-assessment for both student and teacher ratings. An analysis of variance was performed on the gain scores. Combining across student and teacher ratings to get overall pre- and post-scores for each condition for each Unit, the following results were found. The average gain (for all units combined) for the control condition was 16.4. The average gains for the individual, small-group, and medium-group conference conditions were 21.2, 16.2, and 18.8, respectively. Orthogonal contrasts performed on these means indicated that across all conditions, significant gains were made from pre- to post-assessments ($p < .0001$). The control group gained less than the three conference groups ($F = 3.84$; $df = 1, 603$; $p < .05$) and the small-group and medium-group conditions gained less than the individual conference condition ($F = 7.72$; $df = 1, 603$; $p < .01$).

The average pre-post gains for the five Units were: 25.7, 14.7, 12.1, 20.2, and 15.8 for Units I, II, III, IV, and V, respectively. Unit I showed a significantly larger gain than all other Units ($F = 40.49$; $p < .01$). Unit

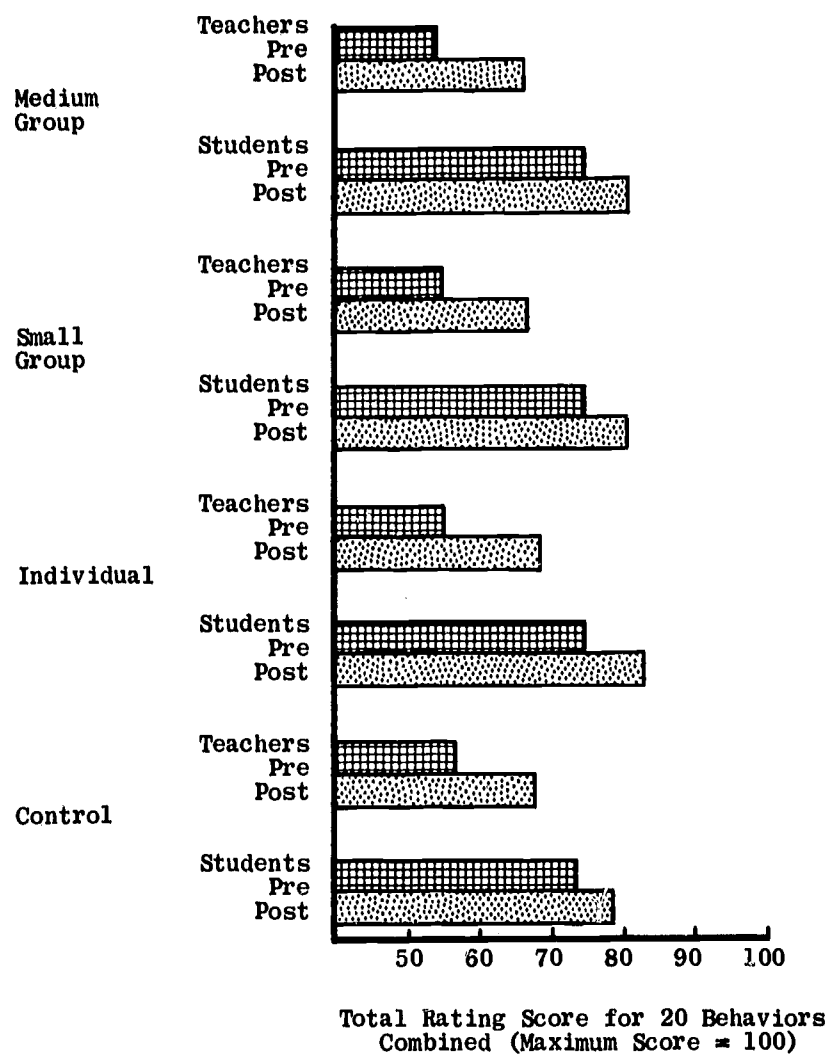


Figure 6. Mean Pre- and Post-Ratings for Students and Teachers by Conditions (Summed Across Units)

III gained significantly less than did Units IV and V and Unit IV gained more than Unit V.

Summarizing the overall pre-post gains analysis, there was a significant tendency for the students in the conference conditions to show greater gains than students in the control group. Students receiving individual conferences gained more than students in small or medium groups. The latter two conditions did not differ. While the units differed in the amount of gain with Unit I gaining the most, there was no interaction of the treatments with the units. That is, the differences in gains between conditions was not qualified by the unit level.

When the analysis of pre-post gain scores was done separately for student and teacher ratings, significant differences between conference conditions appeared only in the student ratings.

The average gains for the four conditions from pre- to post-assessment for the student

ratings were: 4.7, 7.7, 4.4, and 5.8 for the control, individual, small-group, and medium-group conditions, respectively. Orthogonal contrasts showed the individual conference group to be superior to the other groups which did not differ from one another. The average gains on the teacher assessments showed the same pattern as the student ratings but no significant differences among conditions were obtained. The mean gains in teacher ratings were: 11.7, 13.5, 11.7, and 12.9 for the control, individual, small group, and medium group, respectively.

The differences in gains between Units for both student and teacher assessments roughly paralleled the differences reported above for the analysis on overall pre-post gains.

As noted previously, the students consistently rated themselves higher than the teachers rated them, the difference being highly significant ($p < .001$). Across Units the average difference between student and teacher assessments (summed across pre- and post-) were: 29.4, 34.0, 34.0, and 37.3 for the control, individual, small-group, and medium-group conference conditions, respectively. The teacher and student ratings in the control group differed significantly less than they did in the experimental groups ($F = 5.15$; $p < .05$). There was also significantly better agreement between teacher and student ratings in Unit I than in any of the other units ($F = 46.95$; $p < .01$).

In general, the teacher ratings seemed to change more from pre to post than did the student ratings. The average change from pre to post-assessment for the teachers was about 12. The average change in student ratings was about 6. The difference in gains for students and teachers did not depend upon conference condition. However, the differences in change from pre to post for students and teachers appeared to increase in the higher units. Units III, IV, and V showed significantly greater discrepancies between teacher and student ratings in amount of gain shown ($F = 46.56$; $p > .01$).

TEACHER COMMENTS

This part of the results section is based on the comments of the principal and unit leaders in a series of interviews. Unit leaders were asked to reflect not only their own views, but those of the teachers in their unit and, of course, the principal reflected on the project from the standpoint of the total staff.

During the interviews, Unit leaders responded to five basic questions about the project:

1. What was the overall effect of the conferences in your Unit?
Or in your school?
2. Can you give examples that illustrate the effect of the conferences?
3. Did group size and/or group composition appear to be a factor in the effectiveness of the conferences?
4. Was the non-directive approach successful with your age level?
5. Other comments on the project?

These comments are arranged by Unit with a separate summary commentary by the principal.

The Unit I leader expressed the observations of the Kindergarten teachers as follows:

OVERALL EFFECT. The project focused children's attention on what was expected of them in school without having it valued as "good" or "bad" by an adult. Also, for the first time, teachers discussed basic processes with children. Usually teachers emphasize the "follow directions" behaviors and do not encourage children to think for themselves. In addition, conferences stimulated the egos of the children after they found that someone cared enough to talk to them. The informal conference situation gave the teachers insight into the child's life outside the school—an insight they do not get in a normal classroom situation.

GROUP SIZE AND COMPOSITION. At this Kindergarten level, teachers felt that the small group of 2-3 children was most effective. Unless a child had a good self-image, he seemed to feel he was being "scolded" in the one-to-one situation: in a group larger than four, some of the shy children did not participate. Three children seemed to form an ideal sized group.

NON-DIRECTIVE APPROACH. Teachers found this approach difficult at this level but as they worked with it, they were encouraged by the children's free response. They felt that the real value of this approach was that it avoided superimposing values on the child from the outside so that he could develop his own reasons for being in school and for discipline in his own value system.

OTHER. They felt the conferences could be most effective if they were tied to a subject-matter area like reading where there would be more emphasis on the goal-setting aspects of the conferences.

Reflections of the Unit leader and teachers in Unit II (First Grade):

OVERALL EFFECT. Most of the teachers were very enthusiastic about the effects of the project and felt that the children became much more aware of their behaviors which before the project had never been discussed except when a child had done something wrong. The project focused on everyone's behavior—good or bad—but from a positive viewpoint.

All children in the Unit except those with emotional or physical disabilities seemed to participate equally in the project. Teachers felt that all children, regardless of achievement, could relate to these behaviors. They noticed that the higher achievers tended to be more "self-critical" than did lower achievers.

Two examples of conference effects were that children reminded themselves to finish a task and children discussed a particular behavior with the leader and with other teachers who were not their instructors.

GROUP SIZE AND COMPOSITION. Teachers generally preferred the small group of 3-4 children, although some noted that children related well in one-to-one conferences. Less aggressive children seemed not to participate in the larger groups. The control group children, who did not receive conferences, were not noticeably different from the others. The teachers felt the reason for this was the general spirit of the project and the carry-over into other activities on the part of both the conference children and the teachers. They mentioned that leadership emerged in groups without leaders as the conferences proceeded.

NON-DIRECTIVE APPROACH. Most teachers are not trained in this approach and found it difficult, especially at first, just to sit back and listen and inquire. The Unit leader felt that the approach could be effective with first graders if adults were properly trained.

OTHER. In this short period of time, there was no noticeable change in achievement although students' attention to their tasks was noticeably improved. Teachers in this Unit indicated they would like to repeat the project over a longer period of time and would like training input in the techniques for this type of non-directive approach.

Observations and comments of the Unit leader and teachers in Unit III (Grade Two level):

OVERALL EFFECT. Teacher reactions to the conference project were very positive. An instructional aide substituted for a teacher who

was ill in this Unit/and she also reported the conferences as a rewarding and positive experience. Generally, teachers pointed out that children with specific behavior problems improved noticeably during the project period and that the informal conferences encouraged children to mention home conditions that teachers were not familiar with under general school conditions. This information was helpful to teachers in planning the child's educational program.

All children in the Unit seemed to participate successfully in the conferences. Even the lower achieving children could evaluate their own behaviors, set goals and reach those goals. They also said that many high achievers found many behaviors in which they needed improvement.

GROUP SIZE AND CONDITIONS. Teachers mentioned no preference for one group size over another at this age level. As in the other two primary Units, they did not notice any difference in behavior between the control group and the conference groups. This may have been because teachers and children in the conference groups talked about the project in the presence of the control group during other activities.

NON-DIRECTIVE APPROACH. This approach is difficult for teachers and children at the Second Grade level. The brighter children seemed to react better to the non-directive approach than did the lower achievers.

OTHER COMMENTS. Teachers in this Unit would like to repeat the project but over a longer period of time. They felt that aides as well as teachers can conduct these conferences. In addition, they felt that adults need training in non-directive conference techniques.

Reflections of Unit leader and teachers from Unit IV (Grades Three and Four):

OVERALL EFFECT . Enthusiasm for conferences in this Unit was extremely high. Teachers felt that the conferences afforded a focal point for behavioral problems. Children said they'd "never thought about behaviors before the project." And teachers indicated that children were "very thoughtful and serious about reaching the goals they had set during the conferences."

Some student reactions when the conferences had ended were that they "were going to work on these behaviors over summer. . . and next year, too." At the final conference, many children were sorry that the conferences had ended and they hoped they'd have them again next year.

These conferences acted as a self-directed approach to discipline in the multiunit flexible organizational plan. Teachers saw the conferences as an opportunity for the child to consider discipline for himself. Noticeable behavioral changes of children at this age level included (1) better use of spare time, (2) children reminding themselves and others to pick up materials and keep lockers cleaned, and (3) better listening habits in class. Changes in behavior were noticeable for children on all levels and this was probably correlated with the participation in the conferences by all children regardless of achievement level. Lower achievers reacted within the groups and expressed their ideas freely. Both low and high achievers seemed fascinated with charting their accomplishments, and they developed a good rapport with the group in evaluating their own strengths and weaknesses.

GROUP SIZE AND CONDITIONS. Teachers and children at this Unit level, especially Fourth Grade, liked the group interaction. Leadership is needed in a group, but in several groups where there were no natural leaders, leadership emerged as the conferences proceeded.

NON-DIRECTIVE APPROACH. All teachers in this Unit felt that this approach was very effective at their level and that the response of the children to it was excellent. They felt that evidence of its success was shown in the child's continuance of more informal conversations with teachers during noon hour and after school.

The teachers in this Unit would like to use the conferences as a regular part of their program.

OTHER. Teachers with long experience as well as those with a few years' experience were equally enthusiastic about the project.

Observations of the leader and teachers in Unit V (Grades Five and Six):

OVERALL EFFECT. Children really improved in their behaviors. This was especially noticeable among Sixth Graders since teachers are usually busy keeping "the lid on" in the spring. But with the conferences, Sixth Graders responded and kept up their academic work right to the last day of school and discipline was no problem. Teachers felt that conferences gave the children individual attention. Especially noticeable changes were seen in the "tomboy" girls who responded enthusiastically to the conferences and seemed to be-

come young ladies. Boys also seemed to take a more mature approach. Instead of bragging and getting a "swelled-head" from their success at the track meet and other competitions, for example, they accepted their successes as a responsibility and took on leadership qualities.

Teachers felt that children with a poor self-image gained the most from the conferences. Participation in the conferences seemed to carry over into participation in other school activities. Although the project period was too short to observe any carry-over into academic work, Learning Center activities had less disturbance, less "goofing off," and more self-direction. The Learning Center was used for purposeful academic work rather than as a place to meet friends.

Overall, the children at this level were really serious about setting and reaching their goals.

GROUP SIZE AND CONDITIONS. Teachers preferred the medium-size group of 6-8 students from the standpoint of economy of time and lively group interaction. The children also expressed a preference for group conferences. However, teachers felt that individual conferences might be more effective with certain types of children. Teachers could not observe differences in behaviors of control and conference-group children. They felt that children in the control group became caught up in the general spirit of the project. Leadership emerged in groups as the conference proceeded.

NON-DIRECTIVE APPROACH. All the teachers were very enthusiastic about this kind of approach for this age level. It encouraged the idea of working together toward "more of a family situation . . . talking freely about behaviors." Two of the six teachers in this unit had previous training and experience at this type of approach, and others felt they would gain from more training in the technique.

Observations and comments of the principal on the overall effects of the project:

The principal said that the project was highly successful not only for the students but for the teachers. Teachers "became catalysts in bringing about a reaction a positive way." Instead of looking at behaviors in a destructive framework, which is all too common, they developed a positive strategy for calling the child's attention to goals. The evaluation sheets listing the 20 behaviors served as a broad framework for pro-social behaviors for the teachers.

The principal pointed out the importance of the conferences in facilitating the multiunit operation at Wilson which includes considerable

movement of children from room to room. The conferences focused children's attention on the need to be responsible and self-directive in their own behavior. The project was really a form of "preventive discipline" since it encouraged students to discuss the "why" of their behavior and not just to do something because someone tells them to.

He felt that the conferences were most effective with the older children and most noticeable changes in behaviors occurred with children in the upper grades. Perhaps this was because they had originally been conditioned to the "self-contained" classroom operation and discipline and they needed the focus on self-direction provided by the conferences. The known "troublemakers" became less frequent visitors to his office.

The principal was especially enthusiastic about this project since children of all academic levels could participate. The best behaved children got a "kind of recognition because teachers and other students thought good behavior was really important." In a school situation disruptive behaviors usually get all the attention. On the other hand, the "troublemakers realized that teachers are not trying to put the student out . . . but are looking to see if he can score."

The principal pointed out that the 20 behaviors included two general types of behaviors: (1) those that indicate what the teacher expects the child to do like "listening to the teachers" and "picking up after completing a project," and (2) self-directed concepts like "reading in spare time" and "continuing to work after making mistakes." As teachers worked with children on these behaviors, they realized that if they expect children to listen, they must have something worthwhile to say. And they realized too that if you expect a child to follow directions, you must be sure the directions are clear.

This mutual recognition of the responsibilities of both child and teacher for behavior became essentially a self-directive approach to education for both. This led to a better atmosphere throughout the whole school. Wilson School has a large number of visitors each week, and the comments on the admirable self-directed behaviors of the children from these visitors increased markedly during the project period. In fact, visitors became so interested in the project that a copy of the evaluation sheets listing the 20 behaviors which were the framework of the project became a standard part of the information visitors took with them from Wilson School.

IV DISCUSSION

The most important finding of the preliminary study in Janesville was that during the course of the project, students made large gains on behavioral ratings which hopefully reflected improvement in actual school conduct. The fact that teacher as well as student ratings showed the same direction of change from pre- to post-assessment lends validity to the notion that the ratings reflected actual behavior on the part of students. Moreover, the observations of the children by teachers during the project period, reflected in the teacher comments in the results section, support the conclusion that the project had a real effect on the children's behavior.

It must be noted, however, that the gains in behavioral ratings were only weakly related to the conditions of the project.

In fact, the conference groups were significantly better than the control group when conditions were compared on an overall pre-to-post gains analysis (summing across teacher and student ratings). Moreover, in this same analysis, the individual conference group was significantly better than either of the group conference conditions. However, when the pre-to-post gains analysis was done separately for teacher ratings and student ratings, significant differences among conditions were found only for the student ratings where the individual conference group was found to be superior.

A tentative conclusion might be that the individual conferences were effective while the group conferences were not. Several factors mitigate this conclusion at the present time. First, almost all teachers noted the "spill-over" from the conference to the control groups. That is, the enthusiasm generated by the conferences in teachers and students alike spread to the control students and motivated them to improve on their school behavior. This, of course, would tend to lessen differences between the conference and control

groups. In spite of this, the individual conferences produced greater gains than did the control but the group conference conditions did not. This, of course, indicates that individual conferences may be more effective than group conferences, but group conferences may still be quite effective.

A second factor to be considered is the brevity of the project. Students received only four conferences during the entire project. Most teachers commented that they felt more time was needed. Presumably more time would result in greater differences between conference and control conditions since the novelty of the project would wear off for the control students. Without the opportunity for discussion and goal setting, these students would lose interest and fail to make further gains.

Related to the briefness of the project was the difficulty teachers reported in utilizing a non-directive approach. Presumably much time early in the project period was spent by teachers in adapting themselves to this role. Thus, the conference may not have been totally effective from the beginning. This would seem to be a particular disadvantage for the group conference conditions since a non-directive approach in a group is probably harder to manage than in a one-to-one situation.

Another important outcome of the pilot study was the enthusiasm for the project reflected in the comments of the teachers, unit leaders, and principal. The comments indicated that the staff felt the conferences were accomplishing the objective of encouraging self-direction on the part of students.

Another outcome of the project was perhaps best reflected in the statement by the principal at Wilson that the conferences and the behavioral assessment sheets provided the teachers with a framework for viewing student behavior positively. Instead of attending largely to instances of misconduct on the part of students,

teachers were encouraged to focus on instances of positive behavior. Thus, the principal considered the greatest effect of the project to be in changing the focus of the teachers' thinking about student conduct. The fact that the teacher ratings showed the greater shifts during the project period support this observation.

In conclusion, further study of the use of individual and group conferences utilizing the non-directive approach with goal setting seems to be warranted on the basis of the results of this pilot study.